

Date: Monday, 1/8/2007 11:06:48 AM
 User: Kim Johnston

Process Sheet

SPLIT - 1

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: SUPPORT (412 AFT)	
Job Number	: 30200		Part Number	: D28961	
Estimate Number	: 11060		Drawing Number	: D2896 REV A4	
P.O. Number	: N/A		Project Number	: N/A	
This Issue	: 1/8/2007 S.O. No. : N/A		Drawing Revision	: A4 B N/A 07/01/10	
Prsh Rev.	: NC		Material	: N/A	
First Issue	: N/A		Due Date	: 1/30/2007	
Previous Run	: 29705		Qty:	20	
Written By	: 02.01.08		Um:	Each	
Checked & Approved By	:		Comment	: Est: B 02/11/26 Reformat; Added P/O; Added mask hole KJ	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	PG	PURCHASING
	Comment: PURCHASING Issue P/O: 2830 Description: D6104-011 Material: 17-4 PH SS (AMS 5643 OR AISI 630) as per Dwg D6104 Material release note required. Blank size makes (2) D2896-1	cL07/01/09 (20)
2.0	D6104011	17-4 SS Roundbar 6.50"OD
	Comment: Qty.: 1.0000 Each(s)/Unit Total: 20.0000 Each(s) Support	Batch 30200 15 deducted M&O 01/01/25
3.0	PACKAGING 1	PACKAGING RESOURCE #1
	Comment: PACKAGING RESOURCE #1 Recieve & Inspect for Transit Damage Ensure Material Release Note is attached	R 1/04/19 (10)
4.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE
	Comment: MORI SEIKI CNC LATHE LARGE Turn blank for Haas as per Folio FA167	QC 6 BG - 07.01.22 (15)
5.0	QC1	INSPECT ALL DIM TO DIM SHEET
	Comment: INSPECT ALL DIM TO DIM SHEET	BG / MS 07/01/25 (15)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
07.01.21	3+	Please insert a step for Level 6 Mat'l insp. Spec control drawing D6104 also missing.	B6	07.01.22		/	/
07.01.25	6	Change Step 6.0 comment "Band Saw" for "HAAS"	MS	07/01/25		7 07.01.25	7 07.01.25

Part No: D2896-1 PAR #: N/A Fault Category: Pass - CNE NCR: Yes No DQA: Date: 07.07.16
 QA: N/C Closed: Date: 07.07.16

WORK ORDER NON-CONFORMANCE (NCR)								
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/02/23	# 6.0	Machine 23 had a alarm and caused the ball mill to plunge in to the part, causing a .004" hole in the Dart logo	J.D. E-mail from D.SHEPHERD	WELD AND REMACHINE THE SURFACE AND ENGRAVE.	J.L 07/02/27	J.L 07/02/27	7 07/02/27	7 07/02/27
07/02/29	6	- 1 part D2896-1 reamed hole is .004 off with 1.764 bore, part moved on fixture to parts w/o tolerance no good on test fit	J.D. 07/02/29	- scrap + no replace Test fit with a set-up	J.L 07/02/29	C 07/02/29	7 07/02/29	7 07/02/29
07/02/29	#6.0	5-points reamed hole is off by .007" by 1.764 Bore 1-part reamed hole is off by .006" by 1.764 Bore.	J.D 07/02/29	SCRAP + NO Replace Test fit with a set-up.	J.L 07/02/29	C 07/02/29	7 07/02/29	7 07/02/29

NOTE: Date & initial all entries

7 Total

Date: Monday, 1/8/2007 11:08:49 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SUPPORT (412 AFT)

Job Number: 30200

Part Number: D28961

Job Number:



Seq. #:	Machine Or Operation:	Description :
6.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
		QP
	Comment: BAND SAW → HAAS	Machine as per Folio FA167 Tumble & Deburr
7.0	QC1	INSPECT ALL DIM TO DIM SHEET
		EP/JL 07/02/29
	Comment: INSPECT ALL DIM TO DIM SHEET	
8.0	QC8	SECOND CHECK
		NL 07/06/25
	Comment: SECOND CHECK	
9.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
		AH
	Comment: HAND FINISHING RESOURCE #1	Mask Ø0.625" hole prior to paint
10.0	POWDER COATING	POWDER COATING
		JZ 07-08
	Comment: POWDER COATING	Prime inside per QSI 005 4.2 Powder Coat White Gloss (Ref: 4.3.5.2) as per QSI 005 4.3 yellow epoxy m 07 07/08
11.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
		23 supports AF
	Comment: INSPECT POWDER COAT	
12.0	PACKAGING 1	PACKAGING RESOURCE #1
		23 parts
	Comment: PACKAGING RESOURCE #1	Identify and Stock Location: crustule RT 07-07-10 11+1 (part)
13.0	QC21	FINAL INSPECTION/W/O RELEASE
		23 parts H 07.07.10
	Comment: FINAL INSPECTION/W/O RELEASE	
	Completion	U 07/07/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	30200
Description: Support	Part Number:	D2896-1
Inspection Dwg: D2896 Rev. A4		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2896 Rev A4/DSK080 Rev A and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions					By	Date
				1	2	3	4			
Lathe Section										
A	3.480	3.485		3.485	3.485	3.485	3.485	3.485	3.485	07.10.24
B	3.990	4.010		4.001	3.995	3.995	3.995	3.995		
C	3.825	3.845		3.834	3.837	3.837	3.837			
D	0.718	0.738		.727	.727	.727	.727			
E	0.090	0.110		.102	.102	.102	.102			
F	3.705	3.725		3.716	3.717	3.717	3.717			
G	1.360	1.380		1.369	1.369	1.370	1.370			
H	1.250	1.260		1.259	1.256	1.256	1.256			
I	6.490	6.510		6.495	6.495	6.495	6.495			
J	0.022	0.042		.032	.032	.032	.032			
K	0.240	0.260		.250	.250	.250	.250			
L	0.107	0.127		.115	.115	.115	.115			
HAAS Section										
AA	2.152	2.172		2.162	2.162	2.162	2.162			
AB	2.340	2.360		2.357	2.351	2.349	2.350			
AC	3.550	3.560		3.554	3.554	3.552	3.551			
AD	3.770	3.790		3.777	3.771	3.770	3.779			
AE	0.065 x 0.315	0.085 x 0.335		0.075 x 0.325	0.075 x 0.325	0.075 x 0.325	0.075 x 0.325			
AF	1.42	1.48		1.458	1.448	1.448	1.450			
AG	0.833	0.853		0.843	0.844	0.843	0.844			
AH	0.240	0.260		0.250	0.250	0.250	0.250			
AI	0.261	0.266		0.261	0.261	0.261	0.261			
AJ	0.189	0.194		0.189	0.190	0.189	0.189			
AK	1.990	2.010		2.000	1.996	2.000	2.000			
AL	0.625	0.630		0.627	0.628	0.628	0.628			
AM	101.75	105.75		DT8707	DT8707	DT8707	DT8707			
AN	0.053	0.073		0.063	0.063	0.063	0.063			
AO	0.927	0.947		0.947	0.947	0.947	0.947			
Ensure that Ø0.625" bore is perpendicular to 1.764" bore within 0.003"										

Accept/Reject

Measured by:	En / J.L.	Audited by:	Ind
Date:	07/02/23	Date:	07/04/25

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	04.05.27	Dimension AE changed	KJ/RF	
C	06.11.22	Note added to HAAS section	KJ/JLM	EE

DART AEROSPACE LTD	Work Order:	30200
Description: Support	Part Number:	D2896-1
Inspection Dwg: D2896 Rev. A4		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2896 Rev A4/DSK080 Rev A and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1 5	2 6	3 7	4 8		
Lathe Section									
A	3.480	3.485		3.485	3.485	3.485	3.485	BA	07-01-21
B	3.990	4.010		3.995	3.995	3.995	3.995		
C	3.825	3.845		3.833	3.833	3.834	3.834		
D	0.718	0.738		.727	.727	.727	.727		
E	0.090	0.110		.103	.104	.104	.104		
F	3.705	3.725		3.717	3.717	3.717	3.717		
G	1.360	1.380		1.370	1.370	1.370	1.370		
H	1.250	1.260		1.254	1.256	1.256	1.256		
I	6.490	6.510		6.495	6.495	6.495	6.495		
J	0.022	0.042		.032	.032	.032	.032		
K	0.240	0.260		.250	.250	.250	.250		
L	0.107	0.127		.117	.117	.117	.117		
M									
HAAS Section									
AA	2.152	2.172		2.162	2.162	2.162	2.162		
AB	2.340	2.360		2.352	2.352	2.350	2.351		
AC	3.550	3.560		3.550	3.552	3.558	3.558		
AD	3.770	3.790		3.778	3.780	3.780	3.780		
AE	0.065 x 0.315	0.085 x 0.335		.075x.325	.075x.325	.075+0.325	.075+0.325		
AF	1.42	1.48		1.453	1.453	1.453	1.453		
AG	0.833	0.853		.847	.847	.847	.847		
AH	0.240	0.260		.250	.250	.250	.250		
AI	0.261	0.266	DT8707	.261	.261	.261	.261		
AJ	0.189	0.194	DT8706	.190	.193	.190	.190		
AK	1.990	2.010		1.996	1.996	1.998	1.998		
AL	0.625	0.630	DT8709	.628	.625	.625	.625		
AM	101.75	105.75	DT8697						
AN	0.053	0.073		.063	.063	.063	.063		
AO	0.927	0.947		.947	.947	.944	.944		

Ensure that $\varnothing 0.625"$ bore is perpendicular to $1.764"$ bore within 0.003"

Accept/Reject

Measured by:	J.L / En	Audited by:	Onf
Date:	07/02/26	Date:	07/06/25

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	04.05.27	Dimension AE changed	KJ/RF	
C	06.11.22	Note added to HAAS section	KJ/JLM	EZ

DART AEROSPACE LTD	Work Order:	30200
Description: Support	Part Number:	D2896-1
Inspection Dwg: D2896 Rev. A4		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2896 Rev A4/DSK080 Rev A and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				9	10	11	12		
				10	10	10	10		
Lathe Section									
A	3.480	3.485		3.485	3.485	3.485	3.485	3.485	3.485
B	3.990	4.010		3.995	3.995	3.995	3.995	3.995	3.995
C	3.825	3.845		3.834	3.834	3.834	3.834	3.834	3.834
D	0.718	0.738		.727	.727	.727	.727	.727	.727
E	0.090	0.110		.102	.103	.103	.103	.103	.103
F	3.705	3.725		3.717	3.717	3.717	3.717	3.717	3.717
G	1.360	1.380		1.370	1.370	1.370	1.370	1.370	1.370
H	1.250	1.260		1.256	1.256	1.256	1.256	1.256	1.256
I	6.490	6.510		6.495	6.495	6.495	6.495	6.495	6.495
J	0.022	0.042		.032	.032	.032	.032	.032	.032
K	0.240	0.260		.250	.250	.250	.250	.250	.250
L	0.107	0.127		.115	.115	.115	.115	.115	.115
M									
HAAS Section									
AA	2.152	2.172		2.162	2.162	2.162	2.162		
AB	2.340	2.360		2.351	2.356	2.355	2.353		
AC	3.550	3.560		3.555	3.556	3.555	3.552		
AD	3.770	3.790		3.784	3.788	3.788	3.785		
AE	0.065 x 0.315	0.085 x 0.335		0.0740	0.0750	0.0750	0.0750	0.0750	0.0750
AF	1.42	1.48		1.440	1.440	1.440	1.451		
AG	0.833	0.853		0.840	0.840	0.840	0.847		
AH	0.240	0.260		0.250	0.250	0.250	0.250		
AI	0.261	0.266	-DT8707	0.261	0.261	0.261	0.261		
AJ	0.189	0.194	DT8706	0.191	0.191	0.191	0.191		
AK	1.990	2.010		1.996	1.991	1.991	1.993		
AL	0.625	0.630	DT8709	0.625	0.627	0.628	0.628		
AM	101.75	105.75	DT8697	/	/	/	/		
AN	0.053	0.073		0.063	0.063	0.063	0.063		
AO	0.927	0.947		0.944	0.947	0.947	0.947		

Ensure that $\varnothing 0.625"$ bore is perpendicular to $1.764"$ bore within 0.003"

Accept/Reject

Measured by:	EP / J.L.	Audited by:	Amal
Date:	07/02/28	Date:	07/06/25

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	04.05.27	Dimension AE changed	KJ/RF	
C	06.11.22	Note added to HAAS section	KJ/JLM	EE

DART AEROSPACE LTD	Work Order:	30200
Description: Support	Part Number:	D2896-1
Inspection Dwg: D2896 Rev. A4		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2896 Rev A4/DSK080 Rev A and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				13	12	18	4		
Lathe Section									
A	3.480	3.485		3.485	3.485	3.485		M8	07/01/25
B	3.990	4.010		3.995	3.995	3.995			
C	3.825	3.845		3.834	3.834	3.834			
D	0.718	0.738		.727	.725	.727			
E	0.090	0.110		.102	.103	.103			
F	3.705	3.725		3.717	3.717	3.717			
G	1.360	1.380		1.370	1.370	1.370			
H	1.250	1.260		1.256	1.256	1.256			
I	6.490	6.510		6.495	6.495	6.495			
J	0.022	0.042		.032	.032	.032			
K	0.240	0.260		.250	.250	.250			
L	0.107	0.127		.115	.115	.115			
M									
HAAS Section									
AA	2.152	2.172		2.162	2.162	2.162			
AB	2.340	2.360		2.353	2.351	2.353			
AC	3.550	3.560		3.553	3.550	3.551			
AD	3.770	3.790		3.782	3.780	3.782			
AE	0.065 x 0.315	0.085 x 0.335		.075X.325	.075X.325	.075X.325			
AF	1.42	1.48		1.451	1.455	1.454			
AG	0.833	0.853		.849	.840	.848			
AH	0.240	0.260		.250	.250	.250			
AI	0.261	0.266	DT8707	.264	.264	.264			
AJ	0.189	0.194	DT8706	.191	.191	.191			
AK	1.990	2.010		1.997	1.999	1.998			
AL	0.625	0.630	DT8709	.628	.628	.628			
AM	101.75	105.75	DT8697						
AN	0.053	0.073		.063	.063	.063			
AO	0.927	0.947		.947	.947	.947			

Ensure that Ø0.625" bore is perpendicular to 1.764" bore within 0.003"

Accept/Reject				
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Measured by:	JL	Audited by:	Amel
Date:	07/02/25	Date:	07/06/25

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	04.05.27	Dimension AE changed	KJ/RF	
C	06.11.22	Note added to HAAS section	KJ/JLM	EZ

DART AEROSPACE LTD	Work Order:	30200
Description: Support	Part Number:	D2896-1
Inspection Dwg: D2896 Rev. A4		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2896 Rev A4/DSK080 Rev A and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
Lathe Section									
A	3.480	3.485							
B	3.990	4.010							
C	3.825	3.845							
D	0.718	0.738							
E	0.090	0.110							
F	3.705	3.725							
G	1.360	1.380							
H	1.250	1.260							
I	6.490	6.510							
J	0.022	0.042							
K	0.240	0.260							
L	0.107	0.127							
M									
HAAS Section									
AA	2.152	2.172							
AB	2.340	2.360							
AC	3.550	3.560							
AD	3.770	3.790							
AE	0.065 x 0.315	0.085 x 0.335							
AF	1.42	1.48							
AG	0.833	0.853							
AH	0.240	0.260							
AI	0.261	0.266	DT8707						
AJ	0.189	0.194	DT8706						
AK	1.990	2.010							
AL	0.625	0.630	DT8709						
AM	101.75	105.75	DT8697						
AN	0.053	0.073							
AO	0.927	0.947							

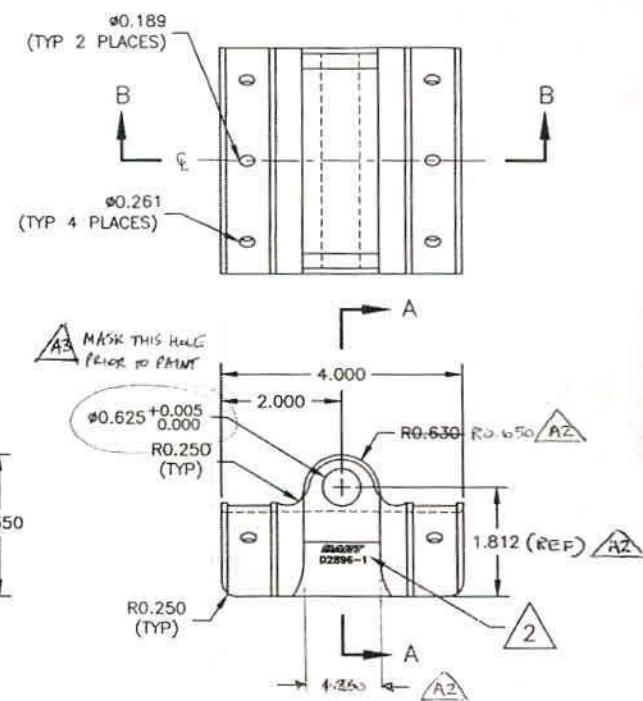
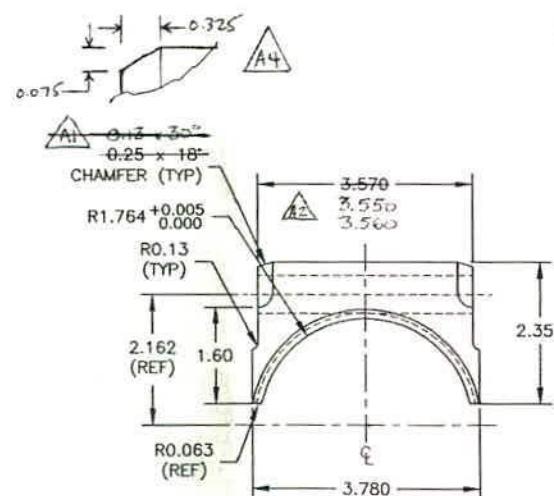
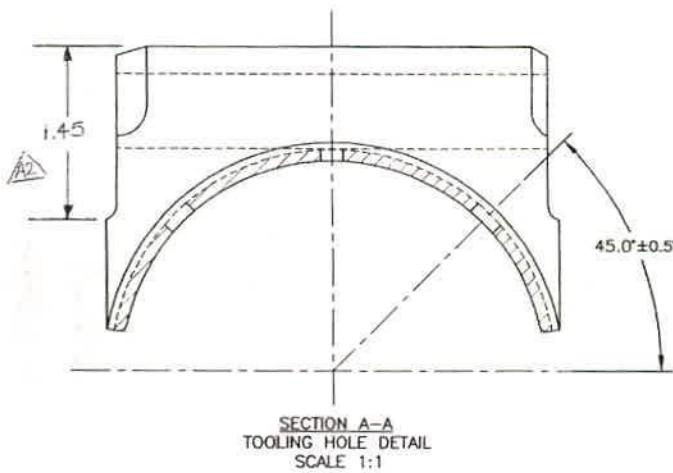
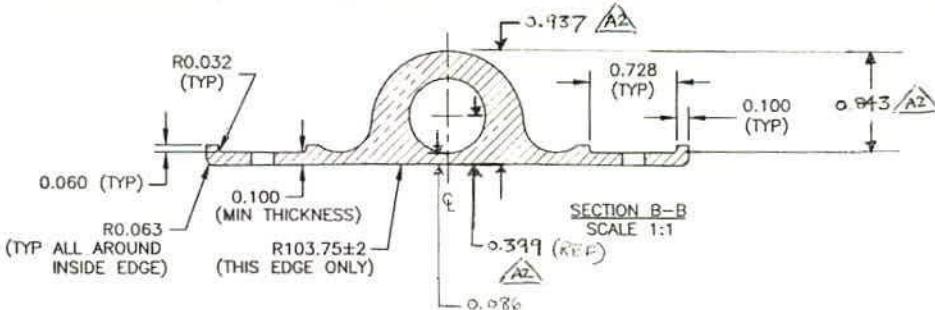
Ensure that Ø0.625" bore is perpendicular to 1.764" bore within 0.003"

Accept/Reject					
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Measured by:		Audited by:	
Date:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	04.05.27	Dimension AE changed	KJ/RF	
C	06.11.22	Note added to HAAS section	KJ/JLM	EE

RELEASED
01.11.13



D2896-1

- 1) MATERIAL: 17-4 PH STAINLESS STEEL
HEAT TREAT TO H900 CONDITION
(900°F FOR 1 HR, AIR COOL)
MIN UTS = 170 KSI (38 HRc)
- 2) IDENTIFY WITH DART LOGO AND PART NUMBER IN THIS AREA
WITH 0.125 HIGH LETTERING 0.010–0.020 DEEP
- 3) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) FINISH: POWDER COAT WHITE (REF 4.3.5.2) PER DART QSI 005 4.3
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 7) ALL DIMENSIONS ARE IN INCHES

NO.
30200
WORK ORDER
SUBJECT TO AMENDMENT
WITHOUT NOTICE
UNCONTROLLED COPY
ENGINEERING
RETURN TO
SHOP COPY

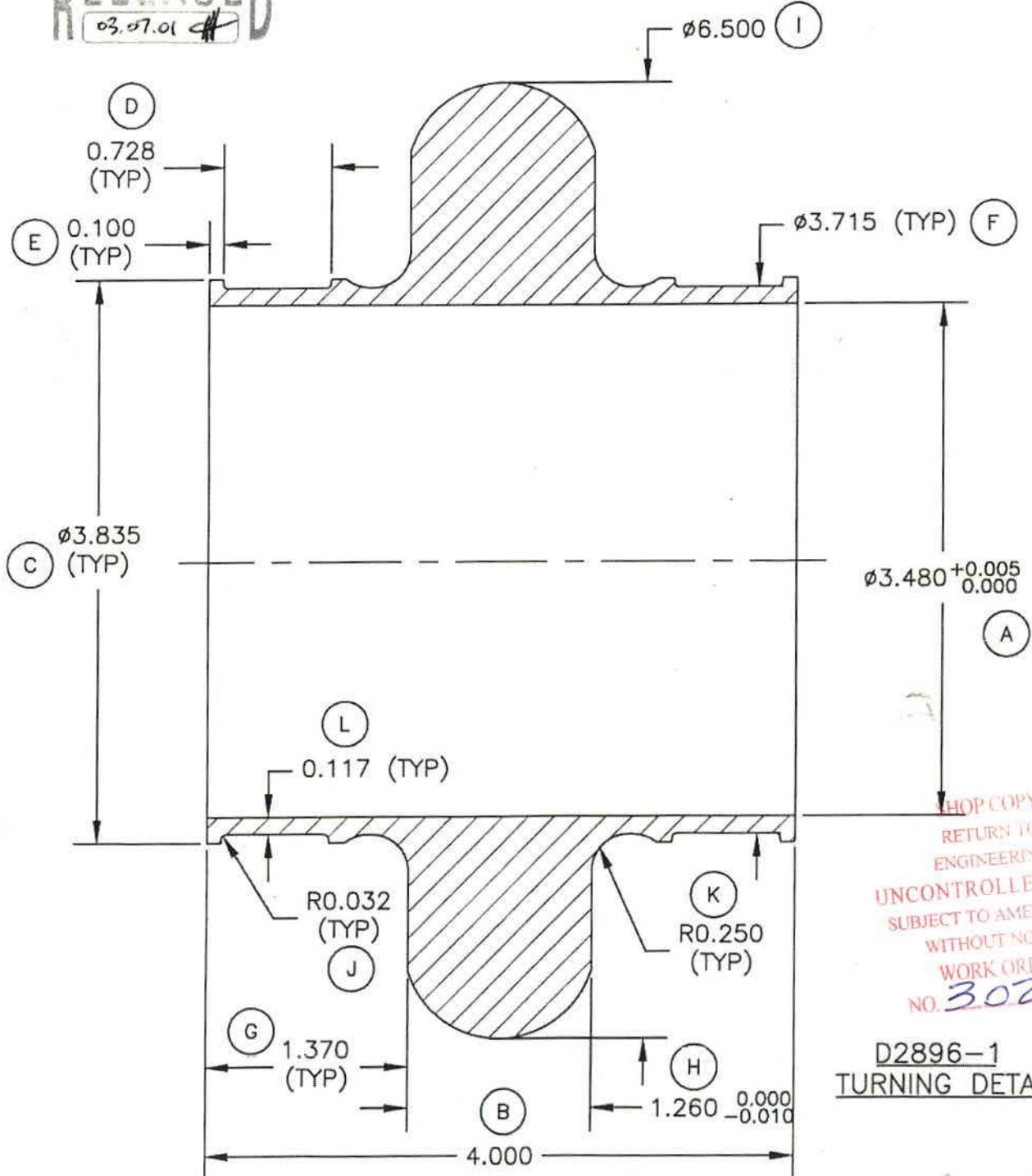
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A4	CP	04.05.14	COLLECT CHAMFER
A3	CP	02.11.20	ADD MASKING NOTE
A2	CP	02.06.04	ADD DIMS, CHANGE RAD
A1	CP	01.11.13	CHANGED CHAMFER CP
A	CP	01.10.19	NEW ISSUE CP
DESIGN CP		DRAWN BY CP	DART AEROSPACE LTD. HALIFAX, NOVA SCOTIA, CANADA
CHECKED CP		APPROVED CP	DRAWING NO. D2896
DATE 01.10.19		TITLE SUPPORT	REV. A SHEET 1 OF 1 SCALE 1:2

DART

DESIGN <i>RF</i>	DRAWN BY <i>RF</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED <i>RF</i>	APPROVED <i>RF</i>	DRAWING NO. DSK 080	REV. A	SHEET 1 OF 1
DATE 03.05.20		TITLE TURNING DETAIL FOR D2896-1	SCALE 1:1	
A	03.05.20	NEW ISSUE		

RELEASED
03.07.01 *RF*

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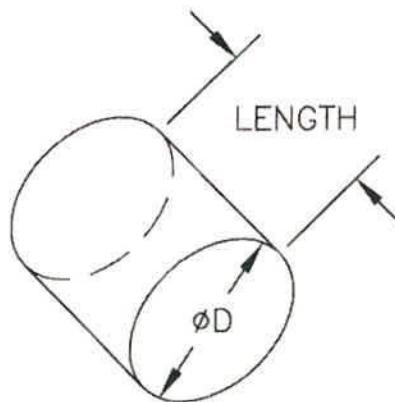
DART

DESIGN <i>FF</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D6104	Rev. B SHEET 1 OF 1
DATE 02.11.25		TITLE ROUND BILLET, 17-4	SCALE NTS
A	01.04.10	NEW ISSUE	
B	02.11.25	CLARIFY ALLOY SPEC ADDED D6104-009/-011 REDUCE LENGTH OF BILLETS	

RELEASED

02.11.29 *[Signature]*

SPECIFICATION CONTROL DRAWING



MATERIAL: 17-4 PH SS (AMS 5643 OR AISI 630) MIN UTS = 170 KSI (38 HRC)

PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, DIAMETER X LENGTH (+0.030/-0.000) AS SHOWN.

TOLERANCE ON ALL DIMENSIONS IS +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES

Part No.	Alloy	D (Diameter)	Length
D6104-001	17-4 PH STAINLESS STEEL	Ø3.00	3.80
D6104-003	17-4 PH STAINLESS STEEL	Ø3.25	3.80
D6104-005	17-4 PH STAINLESS STEEL	Ø4.00	5.10
D6104-007	17-4 PH STAINLESS STEEL	Ø4.50	5.10
D6104-009	17-4 PH STAINLESS STEEL	Ø5.25	4.10
D6104-011	17-4 PH STAINLESS STEEL	Ø6.50	4.10

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**VALBRUNA**

SLATER STAINLESS, INC.

2400 Taylor Street West, P.O. Box 630
Fort Wayne, Indiana USA 46801
Phone: 260-434-2892 Fax: 260-434-2905**Product Certification Report****Report Number: 4245260**

Certified on Dec 19, 2006 Page 1 of 1

Order I.D.	Order Date	Commodity Code						
Dim 1	Dim 2	Dim 3	Heat I.D.	Customer I.D.	Customer Purchase Order			
0601898 001	6/15/06	15003	6.5000	.0000	.0000	243015 001123 01-19532		
Product Shape	Product Surface							
Rounds	HR & Rough Turned				Customer Grade			
Length (Inches)	Bill of Lading #		Weight					
120.000 Min.	168.000 Max.		404559					

Ship To CASTLE METALS
3400 NORTH WOLF ROAD
FRANKLIN PARK, IL 60131

Sold To

VALBRUNA STAINLESS, INC.
2400 TAYLOR STREET WEST
FORT WAYNE, IN 46802

Lifts: 0064 0069

AISI 630

CONDITION A

3174-02 REV 23 DTD 11/15/01

UNS S17400

ASTM A 564-04

ASME SA 564 01 ED 2002 ADD

AMS 2303E

AMS 5643Q

CHEMICAL ANALYSIS:

C	Mn	P	S	Si	Cr	Ni	Mo	Cu	N	Cb	Ta	Cb+Ta
.040	.54	.023	.020	.36	15.58	4.67	.24	3.40	.03	.31	.001	.31

HB

344

TENSILE PROPERTIES**CAPABILITY**

HB	TS (PSI)	.2%YS (PSI)	%EL(2")	%RA	AGE(F)
417	198900	188000	14.0	49.8	900

MAGNETIC PARTICLE TEST

FREQ	SEV
AVG .00	.00

MACRO ASTM E340/E381

MACRO

OK

OK

OK

CASTLE METALS FP

DATE REC'D 12.20.06 AC 15003

APPROVED BY: DH**PERCENT FERRITE**

% FERRITE

AVG .5

Reduction ratio 5 To 1 Min.

Electric Furnace melted; AOD refined.

Ultrasonic test OK.

Chemical testing performed to one or several of the following ASTM methods: E415, E572, E1019, E1085, E1086. No mercury or low melting alloy contamination. No weld repair.

Material melted in Italy, manufactured in the United States.

Material conforms to listed specifications.

Quality system is compliant with ISO 9001:2000. Produced in accordance with EN 10204 3.1B.

Results relate only to the items tested. Certification shall not be reproduced except in full, without written approval of Valbruna Stainless Inc. The recording of false, fictitious, or fraudulent statements on this document may be punished as a felony under federal statutes, including Federal law, Title 18, Chapter 47. Consult material safety data sheet (MSDS) for hazard info.

I hereby certify that the reported figures are correct as contained in the records of the corporation.

Manager Laboratory Services

Dennis Hackett

S Shahbazian

From: David Shepherd [dshepherd@dartaero.com]
Sent: February 26, 2007 6:47 PM
To: 'S Shahbazian'
Cc: 'L Lacelle'; 'Jason Murdoch'
Subject: FW:
Attachments: P1010022.JPG

Serge,

As we discussed at the Engr meeting this afternoon, it is acceptable to me to weld the tool mark/engraving in this part and grind flush.
The part can be re-engraved if it will work out but if not, it is acceptable to me to leave the engraving off as long as we have it on the other side.

David

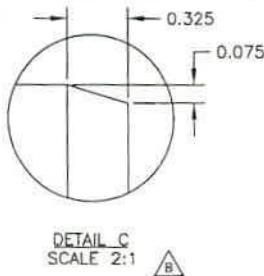
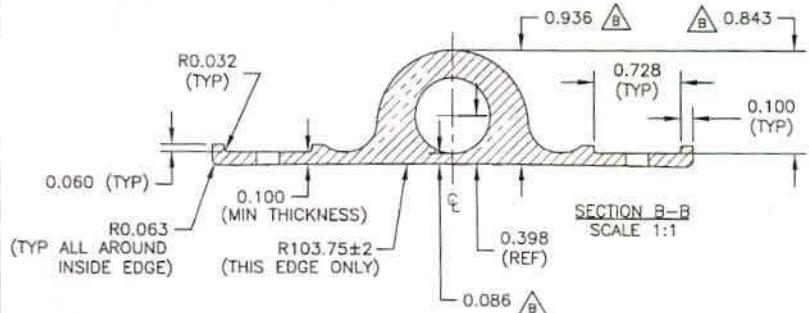
From: S Shahbazian [mailto:sshahbazian@dartaero.com]
Sent: Monday, February 26, 2007 1:18 PM
To: Shepherd, David
Subject:

David,
Look at the photo and we will talk during engineering meeting.

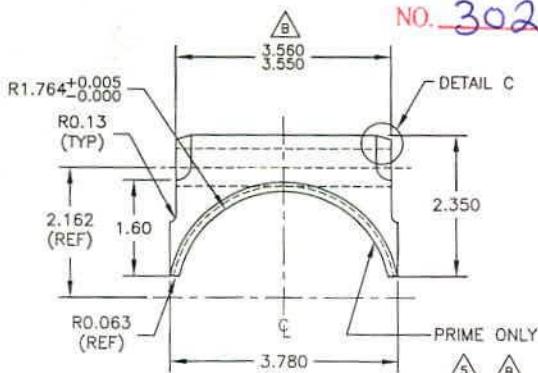
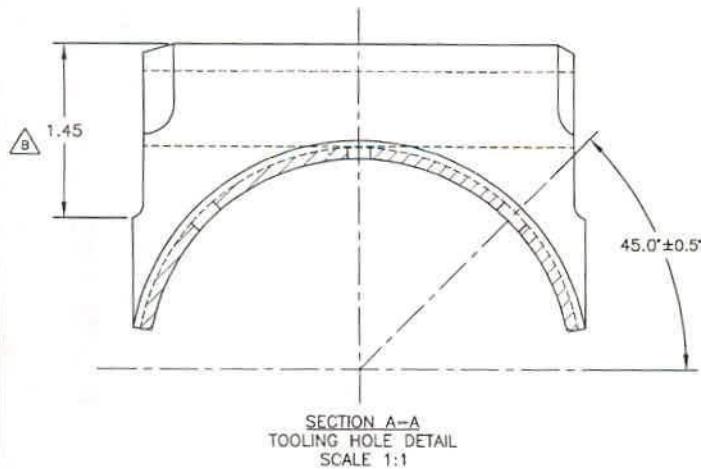
--
No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.1.412 / Virus Database: 268.18.3/699 - Release Date: 2/23/2007

--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.1.412 / Virus Database: 268.18.3/699 - Release Date: 2/23/2007

RELEASED
07.04.12 CP
PER D2896



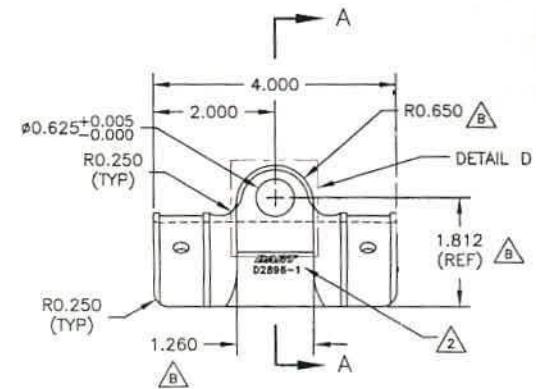
HOLeS \perp WITHIN 0.005
OVER ENTIRE LENGTH



D2896-1

- 1) MATERIAL: 17-4 PH STAINLESS STEEL
HEAT TREAT TO H900 CONDITION
(900°F FOR 1 HR, AIR COOL)
MIN UTS = 170 KSI (38 HRc)
- 2) IDENTIFY WITH DART LOGO AND PART NUMBER IN THIS AREA
WITH 0.125 HIGH LETTERING 0.010-0.020 DEEP
- 3) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) FINISH: POWDER COAT WHITE (REF 4.3.5.2) PER DART QSI 005 4.3
PRIME INSIDE SURFACE AS SHOWN PER DART QSI 005 4.2 *a/7/10*
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 7) ALL DIMENSIONS ARE IN INCHES

SHOP COPY
RETURN TO
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 30200



D2896-1

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DART AEROSPACE LTD.

B	07.03.19	INCORP. A1-A4, FINISHING NOTES
A	01.10.19	NEW ISSUE
DESIGN	DRAWN BY	DART AEROSPACE LTD. WANKEBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D2896
DATE	TITLE	REV. B SHEET 1 OF 1 SCALE 1:2
07.03.19	SUPPORT	